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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,464	06/29/2001	Michel Ruffin	Q64056	7377
23373 7590 07/13/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER PATEL, HARESH N	
			ART UNIT 2154	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/807,464

Applicant(s)

RUFFIN ET AL.

Examiner

Haresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 are subject to examination.

Response to Arguments

2. The appeal brief statement, “In a synchronous system, a transaction may be initiated and guarantee compliance with Atomicity, Coherence, Isolation, and Durability (ACID) properties from information supplier to consumer. (page 3, lines 3-4). However, in the asynchronous communications environment, asynchronous communication channels imply desynchronization of suppliers and consumers. (page 1, lines 26-27). Thus, the actions that guarantee these ACID properties must interact with each other in a particular and reliable way, depending on a required quality of service. (page 3, lines 5-7)”, is noted.

3. Applicant's arguments presented in the appeal brief regarding the claimed subject matter of the latest claims 1-6 is persuasive and, therefore, the finality of office action, dated 4/24/2006, is withdrawn and the prosecution is hereby reopened. However, upon further consideration of the available prior arts, the claimed subject matter is rejected with the new grounds of rejection.

Claim Objections

4. Claims 1, 2, 4 and 6 are objected to because of the following informalities:

Claim 1 mentions “consumer being connected”, which should be --consumer are connected--

Claim 1 mentions “, the method comprising”, which should be --; the method comprising:
--

Claims 1, 4 and 6 mention, "transaction has", which should be --transaction is--

Claims 2, 4 and 6 contain " ," (comma) at the end of sentences, which should be --;-- (semicolon). For example "reliable memory," should be --reliable memory;--

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter. The claim 1 claims the transmitting step that does not produce a useful, concrete and tangible result. Transmitting alone as claimed is not producing a useful, concrete and tangible result (please see claim 1). Further, the claim 1 contain usage of conditional "if" (statement), in which considering that "a previous transaction" is not succeeded, the transactions are not setup and (even) transmitting between the supplier and consumer is also not done.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps/elements/structural cooperative relationships of elements, such omission

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amounting to a gap between the steps/elements/necessary structural connections. See MPEP § 2172.01. The omitted steps/elements/necessary structural connections are: 1) the steps/elements of the body of the claims to adopt and follow Atomicity + Coherence + Isolation + Durability properties in order to accomplish the preamble (i.e., transmitting in accordance with ACID) 2) the independent transactions to adopt and follow Atomicity + Coherence + Isolation + Durability properties 3) “a previous transaction” to adopt and follow Atomicity + Coherence + Isolation + Durability properties 4) the steps/elements to implement actions that guarantee these ACID properties must interact with each other in a particular and reliable way, **depending** on a **required quality of service**. Without implementing these, it is not possible to accomplish the usage of asynchronous communications environment.

Further claim 1 is missing: 5) relationship between “a series of sequential independent transactions” and “a previous transaction” 6) relationship between “a supplier and a consumer” and “a previous transaction”.

7. Claims 1-6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recite the limitations, “a previous transaction has succeeded” which fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not apparent what is considered succeeded versus not succeeded, as the claim does not provide between what entities the previous transaction has succeeded.

The term "previous" in claim 1 is a relative term, which renders the claim indefinite. It is not apparent to what the previous refers to. For examination purposes, since the previous transaction is followed after "a", the examiner will consider the previous transaction being different than "a series of sequential independent transactions".

The term "reliable" in claim 2 is a relative term, which renders the claim indefinite. It is not apparent to what memory is considered reliable versus not reliable.

Claim 4 recites the limitations, "can be" which fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitations, "can be" which fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 6 recite the limitations, "communication channel is a target" which fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not apparent of what the communication channel is the target. Contrarily, it is the consumer that is the target of "said information".

Claims 4 and 6 recite the limitations, "transaction has succeeded" which fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not apparent what is considered succeeded versus not succeeded.

Note: Regarding the applicant's usage of "wherein" and/or "whereby" in the claimed subject matter of the claims, the claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a

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claim to a particular structure. Please see *Minton v. Nat'l Ass'n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Gupta et al., 6,233,585 CrossWorlds Software (Hereinafter Gupta-CrossWorlds).

10. Referring to claim 1, Gupta-CrossWorlds discloses a method of transmitting information asynchronously between a supplier and a consumer in accordance with Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 5), said supplier and said consumer being connected by a chain of communication channels (e.g., col., 3, 5), the method comprising transmitting said information by means of a series of sequential independent transactions set up between said supplier and a first communication channel of said chain (e.g., col., 4, 6), between each of the communication channels of said chain (e.g., col., 4, 6), and between a last communication channel of said chain and said consumer (e.g., col., 4, 6), wherein each of the transactions between the communication channels of said chain and between the last communication channel of said chain and said consumer is set up if a previous transaction has succeeded (e.g., col., 5, 7).

11. Referring to claim 2, Gupta-CrossWorlds discloses the claimed limitations as rejected above. Gupta-CrossWorlds also discloses wherein each communication channel has a set of clients which are other communication channels or consumers (e.g., col., 6, 7), and when one of said communication channels of said chain is a target of one of said independent transactions (e.g., col., 6, 7), the method further comprises: storing said information in a reliable memory, finalizing the one of said independent transactions, and if said one of said independent transactions has succeeded (e.g., col., 6, 7), initiating other independent transactions with said clients containing said information (e.g., col., 6, 7).

12. Referring to claim 3, Gupta-CrossWorlds discloses the claimed limitations as rejected above. Gupta-CrossWorlds also discloses wherein to initiate said independent transactions, said information is stored in a plurality of queues each of which is associated with one of a plurality of clients and consumed by a thread (e.g., col., 10).

13. Referring to claim 4, Gupta-CrossWorlds discloses a communication channel enabling asynchronous transmission of information between a supplier and a consumer in accordance with Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 5), said communication channel having a set of clients which can be other communication channels or consumers (e.g., col., 3, 5), said channel comprising:

means for storing said information which is contained in a transaction for which said communication channel is a target (e.g., col., 4, 6), means for finalizing said transaction (e.g.,

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col., 4, 6), and means for initiating other transactions containing said information with said set of clients if said transaction has succeeded (e.g., col., 5, 7).

14. Referring to claim 5, Gupta-CrossWorlds discloses the claimed limitations as rejected above. Gupta-CrossWorlds also discloses a plurality of queues each of which is associated with one of said clients (e.g., col., 10).

15. Referring to claim 6, Gupta-CrossWorlds discloses a transactional asynchronous communication architecture comprising a plurality of communication channels enabling asynchronous transmission of information between a supplier and a consumer in accordance with Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 5), each of said plurality of communication channels having a set of clients which can be other of said plurality of communication channels or consumers (e.g., col., 3, 5), wherein each of the plurality of communication channels comprises:

means for storing said information contained in a transaction for which said one of the plurality of communication channels is a target (e.g., col., 4, 6), means for finalizing said transaction (e.g., col., 4, 6), and means for initiating other transactions containing said information with said clients if said transaction has succeeded (e.g., col., 5, 7).

16. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by McLaughlin, 7,206,805, Oracle International Corporation (Hereinafter McLaughlin-Oracle).

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17. Referring to claim 1, McLaughin-Oracle discloses a method of transmitting information asynchronously between a supplier and a consumer in accordance with Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 18, 27), said supplier and said consumer being connected by a chain of communication channels (e.g., col., 3, 27), the method comprising transmitting said information by means of a series of sequential independent transactions set up between said supplier and a first communication channel of said chain (e.g., col., 4, 39), between each of the communication channels of said chain (e.g., col., 4, 39), and between a last communication channel of said chain and said consumer (e.g., col., 4, 39), wherein each of the transactions between the communication channels of said chain and between the last communication channel of said chain and said consumer is set up if a previous transaction has succeeded (e.g., col., 5, 40).

18. Referring to claim 2, McLaughin-Oracle discloses the claimed limitations as rejected above. McLaughin-Oracle also discloses wherein each communication channel has a set of clients which are other communication channels or consumers (e.g., col., 6, 41), and when one of said communication channels of said chain is a target of one of said independent transactions (e.g., col., 6, 41), the method further comprises: storing said information in a reliable memory, finalizing the one of said independent transactions, and if said one of said independent transactions has succeeded (e.g., col., 6, 41), initiating other independent transactions with said clients containing said information (e.g., col., 6, 41).

19. Referring to claim 3, McLaughin-Oracle discloses the claimed limitations as rejected above. McLaughin-Oracle also discloses wherein to initiate said independent transactions, said information is stored in a plurality of queues each of which is associated with one of a plurality of clients and consumed by a thread (e.g., col., 18).

20. Referring to claim 4, McLaughin-Oracle discloses a communication channel enabling asynchronous transmission of information between a supplier and a consumer in accordance with Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 27), said communication channel having a set of clients which can be other communication channels or consumers (e.g., col., 3, 27), said channel comprising:

means for storing said information which is contained in a transaction for which said communication channel is a target (e.g., col., 4, 39), means for finalizing said transaction (e.g., col., 4, 39), and means for initiating other transactions containing said information with said set of clients if said transaction has succeeded (e.g., col., 5, 40).

21. Referring to claim 5, McLaughin-Oracle discloses the claimed limitations as rejected above. McLaughin-Oracle also discloses a plurality of queues each of which is associated with one of said clients (e.g., col., 18).

22. Referring to claim 6, McLaughin-Oracle discloses a transactional asynchronous communication architecture comprising a plurality of communication channels enabling asynchronous transmission of information between a supplier and a consumer in accordance with

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Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 18, 27), each of said plurality of communication channels having a set of clients which can be other of said plurality of communication channels or consumers (e.g., col., 3, 18, 27), wherein each of the plurality of communication channels comprises:

means for storing said information contained in a transaction for which said one of the plurality of communication channels is a target (e.g., col., 4, 39), means for finalizing said transaction (e.g., col., 4, 39), and means for initiating other transactions containing said information with said clients if said transaction has succeeded (e.g., col., 5, 40).

23. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Gigliotti et al., GenRad Inc., 6,138,143 (Hereinafter Gigliotti-GenRad).

24. Referring to claim 1, Gigliotti-GenRad discloses a method of transmitting information asynchronously between a supplier and a consumer in accordance with Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 4), said supplier and said consumer being connected by a chain of communication channels (e.g., col., 3, 4), the method comprising

transmitting said information by means of a series of sequential independent transactions set up between said supplier and a first communication channel of said chain (e.g., col., 4, 6), between each of the communication channels of said chain (e.g., col., 4, 6), and between a last communication channel of said chain and said consumer (e.g., col., 4, 6), wherein each of the transactions between the communication channels of said chain and between the last

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communication channel of said chain and said consumer is set up if a previous transaction has succeeded (e.g., col., 6, 9).

25. Referring to claim 2, Gigliotti-GenRad discloses the claimed limitations as rejected above. Gigliotti-GenRad also discloses wherein each communication channel has a set of clients which are other communication channels or consumers (e.g., col., 6, 10), and when one of said communication channels of said chain is a target of one of said independent transactions (e.g., col., 6, 10), the method further comprises: storing said information in a reliable memory, finalizing the one of said independent transactions, and if said one of said independent transactions has succeeded (e.g., col., 6, 10), initiating other independent transactions with said clients containing said information (e.g., col., 6, 10).

26. Referring to claim 3, Gigliotti-GenRad discloses the claimed limitations as rejected above. Gigliotti-GenRad also discloses wherein to initiate said independent transactions, said information is stored in a plurality of queues each of which is associated with one of a plurality of clients and consumed by a thread (e.g., col., 10).

27. Referring to claim 4, Gigliotti-GenRad discloses a communication channel enabling asynchronous transmission of information between a supplier and a consumer in accordance with Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 4), said communication channel having a set of clients which can be other communication channels or consumers (e.g., col., 3, 4), said channel comprising:

means for storing said information which is contained in a transaction for which said communication channel is a target (e.g., col., 4, 6), means for finalizing said transaction (e.g., col., 4, 6), and means for initiating other transactions containing said information with said set of clients if said transaction has succeeded (e.g., col., 6, 9).

28. Referring to claim 5, Gigliotti-GenRad discloses the claimed limitations as rejected above. Gigliotti-GenRad also discloses a plurality of queues each of which is associated with one of said clients (e.g., col., 10).

29. Referring to claim 6, Gigliotti-GenRad discloses a transactional asynchronous communication architecture comprising a plurality of communication channels enabling asynchronous transmission of information between a supplier and a consumer in accordance with Atomicity, Coherence, Isolation and Durability (ACID) properties (e.g., col., 3, 4), each of said plurality of communication channels having a set of clients which can be other of said plurality of communication channels or consumers (e.g., col., 3, 4), wherein each of the plurality of communication channels comprises:

means for storing said information contained in a transaction for which said one of the plurality of communication channels is a target (e.g., col., 4, 6), means for finalizing said transaction (e.g., col., 4, 6), and means for initiating other transactions containing said information with said clients if said transaction has succeeded (e.g., col., 6, 9).

Conclusion

The prior art made of record (forms PTO-892 and applicant provided IDS cited arts) and not relied upon is considered pertinent to applicant's disclosure. For example, 6,012,094, Leymann et al., IBM discloses usage of asynchronous transactions as per ACID, cols 2-5. Dadiomov et al., 6,529,932, Microsoft, also discloses usage of asynchronous transactions as per ACID, cols 2-4.

Multiple references are used for rejection to demonstrate that several references disclose the broadly claimed subject matter.

Examiner has cited particular columns and line numbers and/or paragraphs and/or sections and/or page numbers in the reference(s) as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety, as potentially teaching, all or part of the claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Haresh Patel

Haresh Patel

7/7/2007